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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/577,181	04/25/2006	Markus Hartmann	HH309KFM	1427
	7590 03/09/201 MANS CHERIN & MI	EXAMINER		
U.S. STEEL TO	OWER	YI, STELLA KIM		
600 GRANT ST PITTSBURGH	, PA 15219-2788		ART UNIT	PAPER NUMBER
			1791	
			MAIL DATE	DELIVERY MODE
			03/09/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary		Application No.	Applicant(s)	Applicant(s)		
		10/577,181	HARTMANN ET	HARTMANN ET AL.		
		Examiner	Art Unit			
		Stella Yi	1791			
- Period fo	- The MAILING DATE of this communicater r Reply	tion appears on the cover	sheet with the correspondence a	address		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
2a)⊠	<b>,</b> ,	☐ This action is non-fina		ha mauita ia		
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closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition	on of Claims					
<ul> <li>4) Claim(s) 1,2 and 4 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>5) Claim(s) is/are allowed.</li> <li>6) Claim(s) 1,2,and 4 is/are rejected.</li> <li>7) Claim(s) is/are objected to.</li> <li>8) Claim(s) are subject to restriction and/or election requirement.</li> </ul>						
Application	on Papers					
10) 🗌 7	The specification is objected to by the E The drawing(s) filed on is/are: a) Applicant may not request that any objection Replacement drawing sheet(s) including the The oath or declaration is objected to by	☐ accepted or b)☐ object or to the drawing(s) be held be correction is required if the	in abeyance. See 37 CFR 1.85(a). drawing(s) is objected to. See 37	CFR 1.121(d).		
Priority u	nder 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
2) Notice 3) Inform	(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO- nation Disclosure Statement(s) (PTO/SB/08) No(s)/Mail Date	948) 5) 🔲	nterview Summary (PTO-413) Paper No(s)/Mail Date Notice of Informal Patent Application Other:			

Application/Control Number: 10/577,181 Page 2

Art Unit: 1791

#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over BRESSAN (EP 0303576) and in further view of DAY (5,589,243).

Regarding claims 1-2, BRESSAN discloses a process for producing a thermoplastics plate comprising at least one smooth edge by:

mixing a thermoplastic in an extruder (Col.4, lines 27-34; Figure 1A); extruding the plastic using a slot die to give a flat plastics web (Col.4, lines 35-44;

Figure 1A and 1B);

cooling and calibrating the plastics web on a calendar roll pair (Col.4, lines 45-51; Figure 1A);

drawing off the plastics web (Col.1, lines 4-15); and

side edge of the plastics web is heated after calibration to at least a melting temperature (Col.2, lines 5-7) wherein heating the side edge of the plastic web is performed by flanges (guide grooves) (see 10 and 10' of Figure 6) of the thermoforming device (6) (smoothing device) (Col.5, lines 24-27) to soften and close the side edges of the sheet (Col.5, lines 32-33; 36-39) (pressing the contact surface of the smoothing device against the side edge to smooth and densify the thermoplastic synthetic

material) while the adjacent peripheral surface areas are maintained at a temperature below the softening point by cooling (Col.4, line 59 through Col.5, line 18).

BRESSAN does not explicitly disclose that the said thermoplastic comprises a porous core. However, DAY discloses that panel applications are commonly made from plastic extruded porous foam cores such as polyvinyl chloride (PVC) formulations (Col.1, lines 63-66 and Col.2, lines 33-36). DAY discloses that a problem of fraying occurs along the longitudinal edges of the web after the said plastic porous foam is cut (Col.7, lines 60-61). It would have been obvious to one of ordinary skill in the art to have substituted the plastic porous foam as taught by DAY for the thermoplastic material of BRESSAN for the predictable results of manufacturing a thermoplastic foam board having a coarsely porous core and to seal and smooth the fray edges of the said plastic porous foam web.

Regarding claim 4, BRESSAN discloses longitudinally cutting the sides of the plastic web along the edges prior to heating the side edges (Col.2, lines 35-48).

# Response to Arguments

1. Applicant's arguments filed 11/12/2009 have been fully considered but they are not persuasive.

## **Applicant Argues:**

a) Day fails to mention the problems of sealing and smoothing the edges of an integral foam board.

Art Unit: 1791

Examiner respectfully disagrees with the Applicant's above arguments and would like to point out the reason(s) as discussed in the rejection:

a) "The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference....

Rather, the test is what the combined teachings of those references would have suggested to those of ordinary skill in the art." In re Keller, 642 F.2d 413, 425, 208

USPQ 871, 881 (CCPA 1981). See also In re Sneed, 710 F.2d 1544, 1550, 218 USPQ 385, 389 (Fed. Cir. 1983) ("[I]t is not necessary that the inventions of the references be physically combinable to render obvious the invention under review.").

Also, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. In re Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); In re Merck & Co., Inc., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

BRESSAN does not explicitly disclose that the said thermoplastic comprises a porous core. However, DAY discloses that panel applications are commonly made from plastic extruded porous foam cores such as polyvinyl chloride (PVC) formulations (Col.1, lines 63-66 and Col.2, lines 33-36). DAY discloses that a problem of fraying occurs along the longitudinal edges of the web after the said plastic porous foam is cut (Col.7, lines 60-61). It would have been obvious to one of ordinary skill in the art to have substituted the plastic porous foam as taught by DAY for the thermoplastic material of BRESSAN for the predictable results of manufacturing a thermoplastic foam

Art Unit: 1791

board having a coarsely porous core and to seal and smooth the fray edges of the said plastic porous foam web.

The deficiencies of DAY are taught by BRESSAN wherein BRESSAN teaches the method of producing a thermoplastics plate (thermoplastic board) by heating the side edge of the plastic web performed by flanges (guide grooves) (see 10 and 10' of Figure 6) of the thermoforming device (6) (smoothing device) (Col.5, lines 24-27) to soften and close the side edges of the sheet (Col.5, lines 32-33; 36-39).

Therefore, the combinations of BRESSAN with DAY teach sealing and smoothing the edges of an integral foam board.

### Conclusion

1. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Application/Control Number: 10/577,181 Page 6

Art Unit: 1791

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stella Yi whose telephone number is 571-270-5123. The examiner can normally be reached on Monday - Thursday from 8:00 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on 571-272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Jeff Wollschlager/ Primary Examiner, Art Unit 1791 Application/Control Number: 10/577,181

Page 7

Art Unit: 1791